

**Notice of Allowability**

Application No.

10/776,595

Applicant(s)

AKUTSU ET AL.

Examiner

Art Unit

Allen C. Ho

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 07 July 2006.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jason T. Christiansen (Reg. No. 56,327) on 02 August 2006.

The application has been amended as follows:

- (1) Claim 1, line 9, "shapes" has been replaced by --shape data models--.
- (2) Claim 17, line 8, "shapes" has been replaced by --shape data models--.
- (3) Claim 19, line 8, "shapes" has been replaced by --shape data models--.

### *Allowable Subject Matter*

2. Claims 1-20 are allowed.
3. The following is an examiner's statement of reasons for allowance:

With regard to claims 1-16, the prior art fails to disclose a radiographic x-ray device that comprises a shape data registering means for each x-ray imaging system for pre-registering three dimensional external shape data models corresponding to three dimensional external shapes of the x-ray image system, wherein the models are in a voxel data tree format, as claimed.

With regard to claims 17 and 18, the prior art fails to disclose a radiographic x-ray device that comprises a shape data registering means of the x-ray imaging system for pre-registering three dimensional external shape data models corresponding to three dimensional external shapes of the x-ray imaging system, wherein the models are in voxel data tree format, as claimed.

With regard to claim 19, the prior art fails to disclose a radiographic x-ray device that comprises a shape data registering means of the x-ray imaging system for pre-registering three dimensional external shape data models corresponding to three dimensional external shapes of the x-ray imaging system, wherein the models are in a voxel data tree format as claimed.

With regard to claim 20, the prior art fails to disclose a radiographic x-ray device that comprises a shape data registering means for each x-ray imaging system for advance registration of external shape data of three dimensional models corresponding to three dimensional shapes of the x-ray imaging systems, wherein the shape data is obtained in standard triangle language format, converted into voxel format data, and then converted into binary separated partition data, as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

4. Applicant's arguments filed 07 July 2006 with respect to claims 1-19 have been fully considered and are persuasive. The rejection of claims 1-19 under 35 U.S.C. 112, second paragraph, has been withdrawn.

5. Applicant's arguments filed 07 July 2006 with respect to claims 1-19 have been fully considered and are persuasive. The rejection of claims 1-19 under 35 U.S.C. 103(a) has been withdrawn.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Allen C Ho*

Allen C. Ho, Ph.D.  
Primary Examiner  
Art Unit 2882

02 August 2006